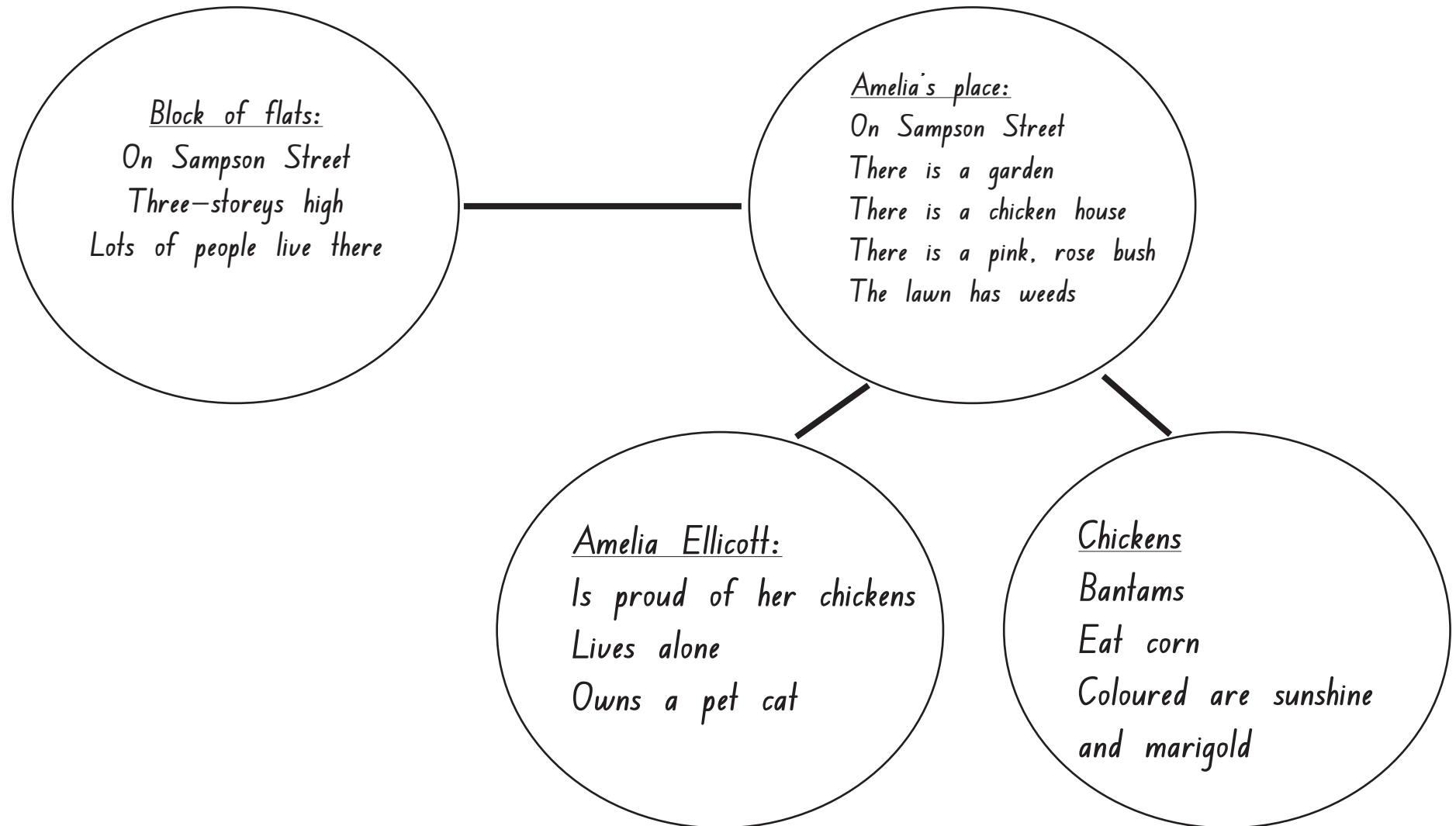


Lesson Plan	Mathematics	Whole Class		
Class: 1/2D - Year 1	Topic: Multiplication & Div	Week: 1	Date: 1 May 2009	
Anticipated Outcomes: NS1.3 Uses a range of mental strategies and concrete materials for multiplication and division				
Activity/purpose/class structure	Indicators	Resources	Assessment	IOT elements
1. Rhythmic counting - small groups • As a class or in small groups, collect items to form a specified number of equal groups. Lead the students in counting the total of the groups. Emphasise the multiple count. For example, when counting groups of three, count 1, 2, 3 , 4, 5, 6 , 7, 8, 9 , stressing each multiple of three. (do ones, twos, fives)	•counting by ones, twos, fives and tens using rhythmic or skip counting			1.1.2 Demonstrate research-based knowledge of the pedagogies of the content/ discipline(s) taught. 3.1.2 Plan and implement coherent lessons and lesson sequences that are designed to engage students and address learning outcomes.
2. Arrays • Introduce concept of arrays by showing an arrangement of 3 groups of 2 separately, then 3 groups of 2 in an array format (uses rows) • Turning arrays- Provide each student with a small sheet of cardboard and a supply of counters. Instruct students to form arrays by placing the counters onto the cardboard following instructions, such as “make three rows of five counters”. Students then turn the card 90° to show a new array of five rows of three. Discuss with the students the number of rows, the number of counters in each row and the total number of counters for each array pattern. <u>Questions</u> - is this arrangement (the groups) the same as this arrangement? (the array) - what about if I rotate this arrangement? (rotate array) - has the total number of counters changed? What has changed? (the number of groups) Write a sentence that describes how it has changed. Draw the different arrangements	• modelling multiplication as equal groups or as an array of equal rows eg two groups of three WMS answer mathematical problems using objects, diagrams, imagery, actions or trial-and-error (Applying Strategies)	counters Paper for writing about arrays	• Participation in discussion • Can represent their logic with a picture of the array	

<p>3. Echidnas</p> <ul style="list-style-type: none"> • Make three or four echidnas from clay or plasticine. Provide the students with a collection of toothpicks. Have the students place equal groups of toothpicks into each echidna. Ask the students to determine the total number of toothpicks, using rhythmic counting. <p><u>Questions</u></p> <ul style="list-style-type: none"> - Here are 3 echidnas. Place an equal number of spikes into each echidna (12 spikes) - how could we describe the echidnas? (draw it) eg. 3 echidnas with 4 spikes. Rhythmic count (by ones 1,2,3,4,5,6..., then automatically 3, 6, 9, 12) - If I gave you 4 echidnas, distribute the spikes evenly. Now how do we describe the echidnas? (4 echidnas with 3 spikes) . <ul style="list-style-type: none"> • What have we done? We have divided the number of spikes. • how could we write that (use division sign). How could we write that as multiples.? (use x sign) 	<ul style="list-style-type: none"> • finding the total number of objects using <ul style="list-style-type: none"> – rhythmic or skip counting • modelling division by sharing a collection of objects into equal groups or as equal rows in an array eg six objects shared between two friends • recognising the symbols \times, \div and $=$ • recording multiplication and division problems using drawings, numerals, symbols and words 	<p>Toothpicks 4x Play dough echidnas Paper for writing about echidnas</p>	<ul style="list-style-type: none"> • Can represent their logic with a picture of the array 	
<p>7. Evaluation of lesson sequence</p> <p>Were tasks appropriate for different abilities/students needs in class? Where to now for each group?</p>				<p>3.1.10</p> <p>Demonstrate an understanding of the principles and practices for using student assessment results to reflect on lesson sequences and inform further planning of teaching and learning.</p>



Block of flats:

On Sampson Street

Three—storeys high

Lots of people live there

Amelia's place:

On Sampson Street

There is a garden

There is a chicken house

There is a pink, rose bush

The lawn has weeds

Amelia Ellicott:

Is proud of her chickens

Lives alone

Owens a pet cat

Chickens

Bantams

Eat corn

Coloured are sunshine

and marigold

My place



The people who live
at my place are...

Draw a picture

Next to my house there is...

Draw a picture

Our neighbours are...

Draw a picture

In my garden there is....

Draw a picture

The things I like to do best
at my place are....

Draw a picture



Name of plant: _____

Type of plant: _____

What does it look like?

Draw a picture

Does it flower? _____

Does it produce fruit? _____

How to take care of this
plant: _____

Name of plant: _____

Type of plant: _____

What does it look like?

Draw a picture

Does it flower? _____

Does it produce fruit? _____

How to take care of this
plant: _____
